

Mechanical Maintenance Technician - 2412

Primary Reason Why Classification Exists

To perform responsible skilled automotive equipment maintenance work in the City garage

Distinguishing Features of the Class

An employee in this class performs skilled technical mechanical work to maintain the operability of the City's fleet of vehicles and related powered equipment. Emphasis of the work is on skilled mechanical maintenance including overhauls, installation of major parts and assemblies, and general repair as well as performing preventive maintenance. The employee is responsible for making diagnosis of repair or replacement of vehicle parts and getting approval from supervisors on the degree of repair required versus replacement of parts to address a malfunctioning system. This employee reports to the shop Superintendent and work is evaluated by visual inspection, feedback from other shop staff and City departments, and attainment of stated performance objectives.

Illustrative Examples of Work

- Performs preventive maintenance service on all City equipment including changing oil, lubrication, cleaning and replacing spark plugs, installing radiator hoses, change out antifreeze coolants, air conditioning tune-ups, replacing belts, and replacing or repairing tires
- Performs major and minor motor repair and replacement work; diagnoses, repairs and overhauls brakes, ignition and fuel systems, transmissions, hydraulic systems, differentials, front and rear axle assemblies and pneumatics
- Performs cooling system repairs; removes radiators, hoses, and water pumps and replaces with new parts; pressurizes cooling system to ensure no leaks
- Repairs mowers; tunes engine, replaces plugs air cleaner and coil, sets governor, repairs mowing deck, welding and straightening frame
- Removes seats in vehicles for fabric repair
- Performs diversified electrical work on automotive equipment such as diagnosing electrical shorts, installing batteries and terminals, repairing and adjusting lights, and repairing generators and starters
- Performs NCI and OBD II state inspections; tests and repairs emission systems and air conditioning systems
- Performs field servicing of vehicles to repair or replace tires, batteries, or assist in other cases of operational failure; diagnoses, adjusts, repairs and services a variety of cars, construction equipment, trucks, scooters and related equipment
- Repairs and overhauls specialized and diesel driven equipment including fire department apparatus and police vehicles
- Fabricates and welds metal objects as needed
- Performs other related work as required

Knowledge, Skills, and Abilities

- Thorough knowledge of the methods, tools, and equipment used in the repair of automotive passenger cars, trucks, construction, and maintenance equipment

- Thorough knowledge of operational characteristics of shop tools such as drills, presses, lathes, grinders, micrometers, brake relining and drum grinding machines, and computer oriented testing and diagnostic software
- Thorough knowledge of the theory and processes of modern mechanical equipment and physical and hydraulic engineering
- Considerable knowledge of electrical wiring schematics and electronics in modern automotive equipment
- Considerable knowledge of modern automotive diagnostic and testing equipment
- Considerable knowledge of basic welding
- Ability to read and understand mechanical and electrical blueprints, wiring schematics, and manufacturers repair manuals
- Ability to plan and lay out the daily technical and maintenance operations
- Ability to operate complex diagnostic and testing equipment and use test results to determine mechanical problems; ability to diagnose problems; ability to detect by inspection any worn or broken automotive parts
- Ability to fabricates and weld metal objects
- Ability to use computer to record notes and specific repair work orders and keep records of repairs, service operations, and make reports
- Ability to detect flaws in the operation of mechanical equipment, electrical circuits, and determine proper remedial actions
- Ability to interpret and work from sketches, diagrams, and installation and repair charts
- Ability to accurately follow oral and written instructions; ability to communicate with garage staff and other City employees
- Skill in the use and the operations of tools and machinery used in equipment repair work including shop tools such as drills, presses, lathes, grinders, micrometers, brake relining and drum grinding machines

Physical Requirements

Work in this class is heavy work requiring exertion of in excess of 100 pounds of force occasionally, and/or in excess of 50 pounds of force frequently, and/or in excess of 20 pounds of force constantly to move objects. Employee must have the visual acuity to perform detailed inspection of small defects or parts, use measurement devices, and assemble parts at distances close to the eyes. Employee must also have the visual acuity to operate motor vehicles and use machines such as hoists, lifts, and perform semi-skilled tasks of a non-repetitive in support of trades' personnel.

Working Conditions

Work is performed in both inside and outside environmental conditions including extreme heat and cold. Employee is subject to noise which requires the worker to shout in order to be heard above the ambient noise level or other noises created in a vehicle maintenance facility. Employee is subject to vibration such as oscillating movements of the extremities or whole body and is subject to work place hazards including mechanical equipment and atmospheric conditions due to exposure to acetylene torches, fumes, odors, dusts, hot metal exhausts, and fuels, greases, and

oils. Employee may work in close quarters, crawl spaces, under or on top of large vehicles, and other areas which could cause claustrophobia or dizziness from heights.

Education and Experience

Graduation from high school or GED equivalency and 7 - 10 years experience in automotive mechanics including the repair and maintenance of trucks, cars, backhoes, ditch diggers, and heavy duty equipment such as tractors and large gasoline and diesel trucks and fire and police apparatus

Special Requirements

- Valid North Carolina commercial driver's license (CDL-B)
- Must obtain NCI and OBD II (On-Board Diagnostic Certification Program for emissions) state inspection certificate after 6-month probation period is completed
- Certified by the Automotive Service Excellence (ASE) after completing eight (8) primary courses. Certification as an automotive technician from Universal Technical Institute (UTI) 450 hour degree program is desired

FLSA Status: Nonexempt (eligible for overtime or equivalent compensatory time at 1½ times the employee's regular weekly rate for all hours worked in excess of 40 hours in the City's official work week and not the employee's work schedule)

Disclaimer

This classification specification has been designed to indicate the general nature and level of work performed by employees within this classification. It is not designed to contain or be interpreted as a comprehensive inventory of all duties, responsibilities, and qualifications required of employees to perform the job. The Physical Requirements and Working Conditions section of this classification may vary from position to position and a more thorough description of these elements can be found in the employee's Position Analysis Questionnaire (PAQ). The employer reserves the right to assign or otherwise modify the duties assigned to this classification.

January 2015